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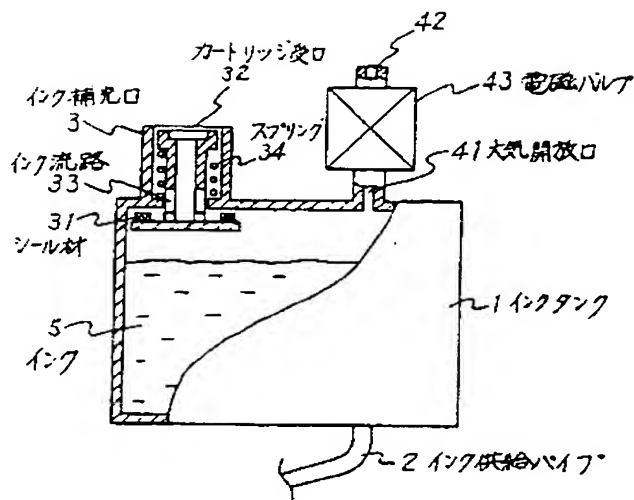
APPLICATION NUMBER : 01153814

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TITLE : INK TANK IN INK JET PRINTER



ABSTRACT : PURPOSE: To stably conduct a high quality printing by providing an ink refilling port provided with a valve mechanism to be opened only at the time of refilling an ink and a leak valve to make an inner pressure releasable to atmosphere under electrical control.

CONSTITUTION: In a normal state that a valve is closed, a seal material 31 is pressed on the top surface of an ink tank 1 by a restoring force of a valve spring 34. At the time of refilling an ink, an ink cartridge is pressed against a cartridge receiving port 32, and the valve of an ink refilling port 3 is opened. In this state, the valve spring 34 is compressed by a pressing force to the ink cartridge, an ink flow path 33 is connected to the inside of the ink tank 1, and the ink flows into the ink tank 1. An electromagnetic valve 43 provided on an atmosphere release port 41 is electrically conducted to be opened at an ink refilling time and a printing time or a purging time. In this manner, a printing can be applied with an invariably stable quality while a pressure inside the ink tank at the time of printing is invariably kept equal to an atmospheric pressure, an unwanted pressure fluctuation is never transmitted to a printing head, and the evaporation of an ink is prevented.

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